WehranEnviroTech

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November 21, 1989

Mr. Laurence Levy, Inc., Trustee
530 East Main Street, Suite 725
Richmond, VA 23219

RE: Jard Company
WE Project No. 00272HF

Dear Mr. Levy:

Enclosed are 8 copies of Wehran's "Draft Environmental Site Assessment of the Jard Company property, Bennington, Vermont." Also enclosed is a copy of the laboratory analysis data sheets as a separate document. Please call if you have any comments or questions. We look forward to continuing work with you.

Sincerely,

WEHRAN ENGINEERING CORPORATION

Bernard J. Franks
Hydrogeology Department Manager

John A. Malter
Office Director

BJF/JAM/dm
cc: Charles Taylor, Esq. (2 copies plus analytical data)
Enclosure

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SHEET

Sheet 1 - Site Property Map

1.0 INTRODUCTION

Wehran Engineering (Wehran) has conducted a preliminary environmental site assessment for the property belonging to Jard Company, Inc., on Bowen Road, Bennington, Vermont. This assessment includes an initial site visit, review of applicable State and local files, a physical site inspection, soil and water sampling and analyses, interviews with available plant personnel, and evaluation of the results of the assessment.

1.1 PURPOSE AND SCOPE

The site assessment was performed for Mr. Laurence H. Levy, Trustee for the Jard Company, as part of an initial environmental audit evaluating the Bowen Road property prior to a possible sale of the property. The objective of this Phase I investigation was to collect limited and pertinent field and analytical data to address any relevant environmental issues regarding the site. Wehran's experience is that such initial, limited, but well-defined, field investigations are generally more informative, economical, and timely than full-scale sampling in the beginning of an assessment. Part of our evaluation will include any recommendations for further data collection needs, if the results of this work so warrant.

The nature of the assessment was based on discussions with Mr. Levy, Mr. Richard Rollins of Jard Company, and Mr. Kenneth Rota of the Vermont Agency of Natural Resources. Mr. Levy provided the overall direction and guidance for the investigation. Mr. Rollins provided access to the property and to relevant company files. Mr. Rota provided access to relevant State files on the Jard property and presented the State's perspective on the limited nature of any initial environmental assessment. Mr. Charles Watson, a former employee, also was interviewed to obtain additional site information. Consequently, as will be discussed in Section 4.0, this Phase I assessment was limited to the property immediately adjacent to the Jard plant building. No attempt was made to investigate or sample the majority of the wooded 34 total acres of company

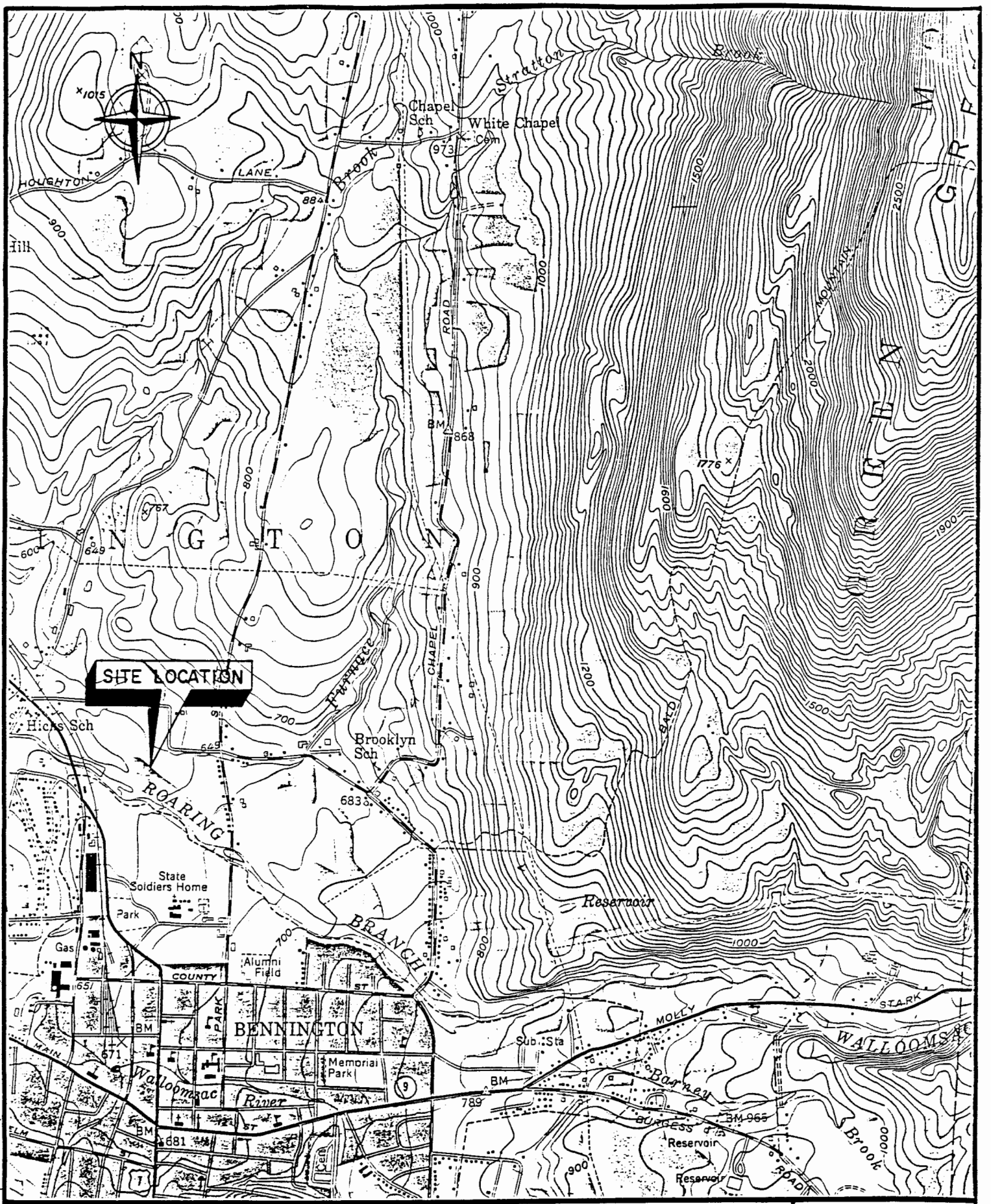
property. As requested, Wehran limited its investigation to the readily accessible part of a 12 acre parcel including the plant building. In particular, the site assessment was limited to the unpaved portion of the property immediately adjacent to and surrounding the building, and additionally to the unpaved area in front of the outside storage area.

The tasks performed as part of this assessment were:

- Site history, including a review of pertinent agency records.
- Site walkover, including assessment of relevant environmental concerns.
- Inventory of wastes stored on site. This task was performed by New England Marine Contractors of Williston, Vermont.
- Soil and water sampling, emphasizing areas of possible historical contamination identified during the initial site visit on September 28, 1989.
- Evaluation of the above data, with recommendations for additional environmental investigations as needed.

1.2 LOCATION AND DESCRIPTION

The Jard Company is located on Bowen Road in Bennington, Vermont (Figure 1). The company owns 34 acres of property, of which part of 12 acres is the focus of this assessment (Sheet 1, in pocket) . Jard was established in 1969 as a manufacturer of small capacitors, small non-fluid transformers, and small motors. Up to 250 employees (in three shifts) have been involved in plant operations. The plant ceased operations in early 1989.



WehranEnviroTech

HRS Reference #24

JARD COMPANY

BENNINGTON VERMONT

SITE LOCATION MAP

Source: U.S.G.S.

Scale: 1"=2,000'

Date: 11/10/89

Project No: 00272 HF

2.0 SITE HISTORY

2.1 SITE OWNERSHIP

The site history was obtained from a property records search regarding past and current site ownership and uses. Most of the information was obtained from the office of the Town Clerk in Bennington, Vermont. The emphasis of the search was to find and trace the transfers of the property in order to establish past uses of the land. Recorded owners of the property, involving three parcels of 9.01, ~~11.15~~ 2.1, and 22.9 acres, are:

July 1923	J. Oliver Burt
July 1942	Elizabeth Barnhardt
July 1951	Vermont Savings Bank. A right-of-way to the Vermont Soldiers' Home probably for water routing, was also identified in this transaction, although it was probably recorded in the early 1900s.
February 1964	Elizabeth Barnhardt
July 1969	Jard Company
February 1970-present	Bennington County Industrial Corporation (BCIC) and other banks, trust companies

The 9.01 acre parcel is believed to be part of the 11.15 acre parcel. Prior to the Jard Company acquiring the parcel, the lot was vacant and wooded. The period since 1970 recorded numerous transactions, but all appeared to be various mortgages and leases between the Jard Company and banks, trusts, and insurance companies. Available maps showing property information included:

- Survey map of Jard Company by Cadiz Consultants, Inc., Bennington, Vermont. On file 4/79, 5/1/79 Book 4, pages 31, 32.

- BCIC land, lands of the Jard Company, 6/69.
- Tax map.

2.2 HISTORICAL SITE OPERATIONS

During production, the oil-filled capacitors were wound, assembled, impregnated with oil, degreased, tested, and painted. The transformers were wound, assembled, varnished, and tested. Hazardous waste streams and their local sources (if known) generated during plant operations included:

- Di-octyl phthalate (DOP) and mixed lubrication oils, behind storage products storage tanks;
- 1,1,1-trichloroethane (TCA);
- Trichloroethene, near the vapor degreaser;
- Paint and print solvents, near paint machine;
- Varnish solids and methylene chloride, at outside transformer exit in side storage cage;
- Waste varnish, in storage area in outside cage;
- Reject motor run capacitors, in inside warehouse; and,
- DOP wastewater, including phosphate cleaner.

The company has been periodically inspected by the State of Vermont for compliance with appropriate regulations. The U.S. Environmental Protection Agency (EPA) was also involved in reviewing compliance with Federal PCB disposal and marking regulations (November 1981 and March 1982). Waste disposal from the site has been through various landfills in New York and Illinois.

During the October 1979 routine State inspection, an oily discharge from a vent pipe on the south side of the building was noted. Subsequent soil sampling revealed PCBs in the darkly stained soils sampled. The State, in a memo from Robert B. Nichols dated April 3, 1980, reported that an area of about 100-square feet was covered with

crushed gravel and soil to minimize the possibility of exposure to the public. The extent of contamination was estimated to be at most a few inches. No soil removal was proposed or conducted.

Since 1979, the State has conducted routine site inspections of the plant operations. No regulatory file data were suggestive of any environmental concerns related to this assessment.

3.0 ENVIRONMENTAL SETTING

The site is located just north of Bennington, Vermont several hundred feet north of the Roaring Branch of the Walloomsac River and just west of the foothills of the Green Mountains. The site topography is essentially flat, with most of the property surrounding the building serving as a paved parking and loading area. Underlying surficial materials consist of thin deposits of coarse-grained stratified glacial drift and stream gravel (with) low to moderate groundwater potential." (A.L. Hodges, Jr., 1966, Groundwater Favorability Map of the Batten Kill, Walloomsac River, and Hoosic River Basins). The depth to water is unknown, but is estimated to be about ten feet based on interviews with former company employees. No surface water bodies were observed on or near the company property, either during the site walkover or on available U.S. Geological Survey topographic maps.

4.0 SITE INSPECTIONS AND SAMPLING

A preliminary walkover was conducted on September 28, 1989. Based on information gathered from that visit, a physical site inspection and environmental sampling was conducted on October 25 and 26, 1989. On the 26th, personnel of New England Marine Contractors (NEMC) inventoried and sampled the drums and tanks on site. NEMC also returned to complete the inventory on November 1, 1989.

4.1 SITE INSPECTION

During the dates of the site inspection, the company property was occupied by a caretaker, with manufacturing operations having ceased earlier in 1989. The inspection included a walk through of the building, a walkover of the adjacent land, and a walkover of part of the adjacent wooded area.

Inside the building, the only noted features included:

- Inside the warehouse (Area 4 on Sheet 1), a rectangular catch basin (approximately 12 x 24 inches) with a metal plate cover and grating. The basin, filled with absorbent material, was used as a drainage basin according to Mr. Watson from a truck washing area in earlier plant days (before that part of the building was used as a warehouse). Possible related, numerous small round covered floor drains were explained by Mr. Watson to be clean-out ports for storm and sanitary system. Wehran was not able to locate any building plans confirming the nature or extent of these drains and connections.
- Walls and ceilings throughout the plant are covered with a light-colored granular-appearing material. Although formally not part of Wehran's environmental assessment, the possibility of asbestos coatings in the building was recognized as a possible concern. It is recommended that the nature

of this wall covering be investigated by a firm certified in asbestos inspections.

Outside of the building, most of our assessment involved sampling of soils adjacent or close to the building, especially in areas of possible contamination. Most of this effort is detailed in Section 4.2 on sampling and analysis. Additionally, the State expressed two concerns:

- A possible leachfield in the back of the building. Although a pre-design map was located which indicated a leachfield area, no indication of actual construction or field evidence of a leachfield was uncovered in this assessment. It is uncertain whether the concrete vault (dry well) is part of a septic system or an underground tank, as reported in State documents (see below).
- The possibility of small capacitors having been used as fill in front of the building (Area 6 on Sheet 1), which was postulated to the State by a former employee of Jard. As part of the site walkover, a metal detector was used to determine the presence or absence of buried metal, including water and sewer pipes, in the shallow soils. The area in questions did indicate evidence of scattered metal, similar to many areas of fill. Attempts to dig by hand were unsuccessful because of the very dry, very coarse (including cobbles) surficial material. The nature of any fill will require a backhoe to determine definitively.

Additional observations during the walkover inspection include a concrete vault adjacent to the east and south sides of the building, and two standpipes (vents?) on the south side near the concrete vault. Descriptions of these structures are presented in Appendix B. It is tentatively assumed that the concrete vaults are some type of dry well, possibly involved with some type of recirculation or distribution of stormwater. The standpipes are tentatively identified as connected to an underground storage tank. The November, 1981, EPA report on inspection of the site referred to in Section 2.0

mentioned a 2,000 gallon underground tank behind the Jard building. Interviews with Mr. Watson support the possible existence of a 2,000 gallon buried cement storage tank, used to store water (stormwater and possibly wastewater) as part of a recirculation cooling system.

The building is connected with city sewer and water systems. There is an on-site well used for partial supply of the building's water needs. Depth of the well is unknown. The State periodically samples this well and certifies the water regarding health advisories. All analyses to date have indicated that the water is potable. The most recent analysis was reported on June 14, 1989 (letter from Vermont Department of Health to the Jard Company). Because no hydrogeologic information is available on the site, it was not possible for this assessment to conclude if the well is upgradient or downgradient of the areas of concern.

A small part of the wooded area on the company property was also included in the walkover. Because the property was a vacant lot prior to Jard acquiring the lot, there is no historical evidence of disposal in the wooded area. Nor was there any readily visible suggestion of activities (such as disposal, leachfields, etc.) in the wooded area. No samples were collected as part of this limited Phase I assessment.

4.2 SAMPLING AND ANALYSES

Soil and water samples were collected from areas shown on Sheet 1 and described in detail in Appendix A. A summary of the sampling procedures and laboratory analyses is presented herein.

Selected areas of possible environmental concern were chosen for sampling. The areas were based on the initial site walkover and areas of concern as described by the State of Vermont. At each location, hand trowels and a shovel were used to collect soil or sediment samples. The nature of the sediment, generally dry sand with gravel and cobbles, prevented digging more than about one foot into the sediment. During the digging, the sampler wore protective clothing (neoprene gloves and saranex coveralls) and

continually monitored the air with an HNU photoionization meter. The clothing minimized the risk of dermal exposure. The suspected contaminants have low volatility, with the possibility of ingestion or inhalation minimal. The HNU monitored for the presence of volatile compounds in the breathing zone. After each sample was collected, the equipment was rinsed with methanol and then deionized water, and dried with paper towels. Water samples were collected using a Teflon® bailer, which was similarly cleaned between uses.

Most samples were analyzed for compounds in EPA Schedule Numbers 601, 602, 606, 608, and for zinc. EPA 601 includes 29 purgeable halocarbons, including known waste stream compounds such as trichloroethane, trichloroethene, and methylene chloride. EPA 602 includes 8 purgeable aromatics, including toluene and xylene. EPA 606 includes 6 phthalates, among which is bis(2-ethlyhexyl) phthalate, also known as DOP, the liquid used in the capacitors. EPA 608 includes 29 Pesticides and PCBs, particularly PCB-1242, which was used in earlier manufacturing of capacitors (prior to 1979). All the above analyses are by gas chromatography.

Four samples were selected for more extensive analyses. EPA 606 was replaced by EPA 625, which includes 45 base neutral extractable compounds (among which are all the EPA 606 compounds) and 11 acid extractable compounds. These analyses are by gas chromatography/mass spectrometry. In addition to zinc, the other 12 metals included in a "priority pollutant" listing were also analyzed in these samples. These include antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and thallium.

The samples were sent to Industrial & Environmental Analysts, Inc., of Essex Junction, Vermont, for analysis. One field blank for water was collected (JC16) and a soil sample on the edge of the site property was collected as a "background" or baseline sample (JC15).

Independently of the above investigation, personnel from New England Marine Contractors (NEMC) inventoried the potentially hazardous materials stored on company

property in drums or tanks. Their cost estimate for removal and disposal of some of these materials, is included herein, as Appendix A. Their estimate includes removal and disposal of all wastewaters and solid waste inventoried during their site visit. Containers which appeared to contain new products (solvents, paints, resins) were not included in NEMC's estimate because of the possibility of their resalability or use in the manufacturing process.

5.0 FINDINGS OF ASSESSMENT

The Jard Company property on Bowen Road in Bennington, Vermont, has been the subject of a limited Phase I property assessment to determine the possible extent of contamination on site, if any, resulting from historical practices of manufacturing or disposal. This section discusses the extent of hazardous materials presently stored on site, presents the results of chemical analyses in terms of applicable State or Federal standards and guidelines, and considers environmental pathways or receptors of potential concern.

5.1 MATERIALS STORED ON PROPERTY

A list of materials (wastewater and solid waste) stored on site as determined in the inventory by NEMC is included in Appendix A, along with their cost proposal for removal and disposal of these wastes. Additional material stored on site, mostly in the form of unused, new products, include:

methanol (6 drums)
exxate 600 (2 drums)
trichloroethane (2 drums)
methyl isoamyl ketone (2 drums)
mobile therm 603 (2 drums)
paraplex 6-60 (1 drum)
paraplex 6-62 (1 drum)
grey enamel paint (3 drums)
synthetic resin (4 drums)
trichloroethane waste (2 drums)
transformer oil (1 drum)
roof coating (2 5-gal)
grey paint (4 5-gal)
methanol (3 5-gal)
acetone (2 5-gal)
capacitor fluid (2 5-gal)
ethylene glycol (1 5-gal))
polypropylene glycol (1 5-gal)
aerovox dope (1 5-gal)
paint thinner (3 5-gal)
amoco-indopol-H-300 (1 5-gal)
plastic remover (1 5-gal)
ice remover (4 5-gal)

5.2 RESULTS OF SAMPLING

Results of chemical analysis discussed in Section 4.2 are summarized in Tables 1 and 2. DOP, PCB-1242, and zinc are present in varying concentrations over most of the samples. Selected purgeable compounds are present in a few of the samples. The data are herein discussed by sampling area. Details of sampling are presented in Appendix B.

Soil samples from Area 1 (JC01 and JC02) are high in DOP and zinc, and elevated somewhat in PCBs. JC01 was also high in several purgeable compounds.

Area 2 includes two soil samples (JC03 and JC04), one water (JC05), and one associated sediment sample (JC06). The soils are slightly high in DOP, and high in PCBs and zinc. No purgeable compounds were identified. The water sample was free of significant target compounds, although the sediment was quite high in levels of POP, PCBs, zinc, and several purgeable compounds. Levels of antimony and mercury were also elevated.

Area 3A includes soil samples JC07 and JC08. DOP, PCBs, and zinc were quite high in JC07 along with low levels of selected purgeable compounds. Levels of zinc in JC08 were quite high, but other contaminants were of relatively low concentrations.

Area 3B includes two soil samples (JC09 and JC10), two water samples JC11 and JC12) and one sediment sample (JC14). The soil samples were quite high in DOP and zinc, and relatively low in PCBs. The water sample from the upper part of the standpipe was free of contaminants. The water sample from the base of the standpipe was slightly elevated in DOP and high in PCBs. Selected purgeable compounds were slightly elevated. The sediment sample was high in DOP and zinc, with elevated PCBs.

Area 4 includes sediment sample JC13, with the maximum concentrations of DOP and PCBs recorded on site. Zinc was slightly elevated.

Area 5 includes soil sample JC15, with slightly elevated concentrations of DOP, PCBs, and zinc.

TABLE 1
CONCENTRATIONS, IN PARTS PER MILLION, OF SELECTED COMPOUNDS FOUND AT THE JARD COMPANY

Sample Location	* Di- Bis (2-Ethylhexyl) Phthalate (DOP) dioctyl nonyl phthalate dioctyl phthalate	PCB-1242	Zinc
JC01	4,200	11	2,960
JC02 area 1	1,500	5.1	614
JC03	180	270	64,900
JC04 area 2	<250	180	466,000
in vault JC05 (water)	<0.1	0.16	5.55
in vault JC06 (Sediment)	810	280	11,500
JC07	30,000 (1)	820	36,700
area 3A JC08	2 (2)	35	112,000
JC09	20,000	32	78,500
JC10	3,000	28	18,100
stand pipe to tank area 3B JC11 (water)	<0.01	<0.0005	0.146
stand pipe to tank JC12 (water)	<10 (3)	690	5.00
JC13 ← area 4 (Sediment)	36,000	4,900	753
JC14 (Sediment)	1,400	98	191,000
JC15 area 5 (background)	15	6.7	1,480
JC16 (water) (field blank)	<0.01	<0.0005	0.054

(1) also diethylphthalate (660)
(2) also di-n-butyl phthalate (2)
(3) duplicate analysis (15)

* Liquid used in vacuum pumps.

Table 2

CONCENTRATIONS, IN PARTS PER BILLION, OF
PURGEABLE COMPOUNDS FOUND AT THE JARD COMPANY
CONCENTRATION IS IN PARENTHESIS NEXT TO SAMPLE LOCATION

Chloroform	Trichloroethane	Trichloroethene	Dichloroethene
JC02 (10)	JC01 (180)	JC01 (4,300) storage area	JC02 (8.8)
JC05 (1.8)	JC02 (12)	JC02 (36) water	JC05 (150) —
JC07 (3.3) water	JC12 (36) —	JC07 (2.2)	
JC09 (8.0)	JC13 (1,380) floor drain	JC09 (11)	
JC10 (3.3)	water	JC11 (2.2)	
JC11 (40) water	water	JC12 (23) —	
JC15 (1.2)		JC13 (2,000) area 4 floor drain	
JC16 (2.8)			

Methylene Chloride	Chlorobenzene	Dichlorobenzene	Bromodichloromethane
JC01 (220)	JC02 (6.6) water	JC12 (300) —	JC11 (1.3) water
JC11 (1.6) water	JC07 (3.3)		JC12 (1.2) water
JC12 (1.6) water	JC12 (1.2) water		
JC14 (22)			
JC16 (2.7) water + silt			

Table 2 (Continued)

CONCENTRATIONS, IN PARTS PER BILLION, OF
PURGEABLE COMPOUNDS FOUND AT THE JARD COMPANY
CONCENTRATION IS IN PARENTHESIS NEXT TO SAMPLE LOCATION

Benzene	Chlorobenzene	Ethylbenzene	Toluene	Xylene
JC02 (15)	JC02 (9.9)	JC06 (1,300)	JC02 (20)	JC06 (10,000)
JC07 (16)	JC07 (6.6)	JC07 (7.7)	JC06 (12,000)	JC07 (23)
	JC12 (1.2) water		JC07 (16)	JC12 (4.5) water
			JC08 (5.2)	
			JC09 (2.3)	

NOTES: JC05 had a large quantitation limit (140 ug/kg) due to sample dilution of non-target compounds.

JC13 had 560 ug/kg 1,1,1-trichloroethane and 820 ug/kg 1,1,2-trichloroethane. Other purgeables were all less than 250 ug/kg.

On several of the purgeable analyses, presence of non-target compounds resulted in high quantitation limits.

Duplicate analysis for dichlorobenzene confirmed 300 ug/kg in JC12.

The aqueous field blank, JC16, was free of contamination.

In summary, soil samples from the property generally contained levels of PCBs above the advisory level of 50 ppm. The levels of phthalates and zinc, although generally also high, tend to correlate with high concentrations of PCBs. Water samples are above the standard for PCBs in JC05 and JC12, above the standards for dichloroethene in JC05, and above the standards for trichloroethane, trichloroethene, and dichlorobenzene in JC12. Because no standard exists for phthalate or zinc, any remediation will be driven by the levels of PCBs in the soil and sediment, or by the limited occurrences of selected purgeable compounds found in the soil and sediment.

The EPA has concluded that PCBs in concentrations greater than 50 ppm are covered by the Federal Toxic Substance Control Act (TSCA) regulations, although some State excavation criteria (such as New Jersey Regulations) are as low as 1 ppm. Some phthalates, in particular DOP, are "probable human carcinogens," and as such are regulated, but no set criterion has yet been developed. Zinc has been removed by EPA from the list of contaminants to be regulated. Although some of the other metals and selected purgeable compounds also have applicable standards, they need not be considered herein because of their relatively low concentrations. The site-specifics, also with subsequent recommendations for environmental cleanup, will almost certainly be driven by the PCB and selected purgeable compounds concentrations found in the samples.

According to Chapter 12, Section 12-708 of the Vermont "Ground Water Protection Rule and Strategy," whenever an Enforcement Standard or Preventive Action Limit is exceeded in a groundwater sample, "the owner or operator of the activity shall notify the Secretary in writing." Soil criteria in Vermont are generally considered to be 20 times the applicable groundwater standard. Based on this multiplier, trichloroethane and methylene chloride are in excess of the Enforcement Standard in JC01. PCBs are above the Enforcement Standard in water sample JC05 and JC12. PCBs are also above the TSCA limit in soil samples JC03, JC04, JC06, JC07, JC13, and JC14.

5.3 POTENTIAL PATHWAYS OR RECEPTORS

The surficial soils adjacent to the Jard Company building are generally contaminated with PCBs exceeding TSCA advisory levels. Limited information is available on the depth to groundwater or the drainage system associated with the dry wells. Potential pathways include exposure to surficial soils and, possibly, direct connection between the dry wells and the groundwater. If the groundwater is hydraulically connected to these pathways, the Walloomsac River may ultimately be a receptor of site chemicals.

6.0 RECOMMENDATIONS

The Phase I site assessment for the Jard Company property in Bennington, Vermont, suggests that surficial soil contamination is relatively extensive. Based on the results of initial sampling, the following tasks are proposed:

- Removal and disposal of the wastes stored on site as documented in Appendix A. Wehran suggests that further details regarding waste disposal of the materials listed in Appendix A be worked out directly with New England Marine Contractors.
- Costing of the removal of the underground tank or septic system found in Area 3B (Sample 12).
- A series of test pits around the property, particularly in the six areas initially sampled in this investigation, to determine the depth of contamination.
- Investigation of pathways and connections of installed on-site plumbing, especially regarding possible movement of liquid from JC13 and the dry wells (JC06 and JC14). This investigation should consist of a complete record and file search of the company records. In particular, it is necessary to investigate if a potential hydraulic connection with the groundwater in any of these areas exists.
- If a leachfield is found to exist as part of a septic system, then some shallow borings or wells will be needed to characterize the surficial groundwater to determine the extent of any contamination. The use of surface geophysical techniques to map a possible leachfield should also be considered, depending on the results of the property records' search.
- Surficial soil samples in more extended areas of the property are advised, based on levels on contaminants seen on site, particularly in JC15, which had been intended as a background sample but showed presence of DOP, PCBs, and zinc.

In summary, results of the limited Phase I site assessment suggest fairly extensive levels of surficial (one foot depth) on-site contamination. Further investigation is suggested to determine the vertical and horizontal extent of contamination. The investigation will need to include test pits, boreholes, and further information on the installed man-made passageways (pipes and plumbing) beneath and near the site building.

APPENDIX A

NEW ENGLAND MARINE CONTRACTORS' INVENTORY

NEW ENGLAND
MARINE CONTRACTORS, INC.
13 Dorset Lane
Williston, Vermont 05495
Telephone: 802-879-8800
Facsimile: 802-879-1273

NEMC

16 Nov 1989

Wehran Engineering Corporation
Chace Mill 3-20
1 Mill Street
Burlington, VT 05401
ATTN: Bernard Franks

Dear Mr. Franks

The following is our proposal for the disposal of wastes at the Jard Company site in Bennington, Vermont.

D.O.P. & Water via bulk transport.....$16,000.00

Solvent & Water (6 Drums).....$1,800.00

21 CY Rejected Capacitors*
* Final cost based on weight.
Must be placed in 55 gal drums for transport.
Estimated weight 40,000 lbs
Disposal Unit price $1.45/lb
New drums 100 est. Unit Price $35.00 each
Transport $4000
Estimated Price.....$65,500.00

Paint solvents & 1,1,1 Trichloroethane.....$2,800.00

Capacitor Scrap (1 Drum).....$600.00

Capacitor Fluid (1 Drum).....$793.00

Exxate 600 (3 Drums).....$1200.00

Zinc Waste* (E.P.A. Hazardous).....$8500.00
* Any drums not legally transportable will have to be transferred into new drums.

Drum Cleaning and disposal Unit Price $25.00 each

Vinyl Phenolic Adhesive*.....$1800.00

Enamel Paint* (5 Drums).....$1500.00
* Not acceptable as virgin products

P.O. Box 2974
Poughkeepsie, N.Y. 12603
914-473-3455
(Fax) 914-473-7259

ENVIRONMENTAL SERVICES
HAZARDOUS WASTE TRANSPORTATION
GROUNDWATER REMEDIATION

New Materials can be removed: Unit Price $35.00/container
Transportation $1200.00/trip

Field Crew.....$800.00/day

Unknowns (2 drums) will have to analyzed before disposal applications can be processed.

Disposal applications and waste stream approvals....$2500.00

Prices above DO NOT include applicable taxes.

PROPOSAL BASED ON:

Prices subject to disposal facilities final acceptance and pricing.

All drums be in legally transportable condition.

No P.C.B.s in any of the above wastes.

Proposal good for thirty days from this date.

Thank you for allowing New England Marine Contractors the opportunity to present this proposal. Should you have any questions concerning this matter or any of our other services, please feel free to contact me at 802-879-8800.

Sincerely,

Lawrence C. Mercilliott

Lawrence C. Mercilliott
Customer Service Manager

LCM/lm

APPENDIX B

DESCRIPTIONS OF SAMPLE LOCATIONS

APPENDIX B

DESCRIPTION OF SAMPLE LOCATIONS

Sample	Description
JC01	Area 1 (See Sheet 1 for location of areas). Adjacent to outside storage area, twelve feet south of southwest corner of storage cage, immediately adjacent to empty drums. Medium-grained, light-brown sand with pebbles and cobbles. Dark staining throughout. Very difficult to dig with shovel deeper than about 8 inches. At two-inches depth, a thin black organic layer was encountered, which produced HNU readings of 5 to 10 ppm, which quickly dissipated.
JC02	Area 1, six feet due north of JC01. Fine to coarse light-brown sand with pebbles. Cobbles at 8 inches prevented further digging. No evident staining. HNU readings of about 3 ppm.
JC03	Area 2, adjacent to east side of building near paint spray operations area, eight feet south of center of concrete vault (see JC05). Fine-grained, medium-brown sand with numerous pebbles and cobbles. Sample at 9-inches depth. All HNU reading less than 1 ppm. No sign of staining.
JC04	Area 2, six-feet north of center of concrete vault. Same as JC03.
JC05	Area 2, in 4.5 foot diameter concrete vault. Removable plug in center is 20 inches x 22 inches. Walls of vault are solid-appearing cinder blocks with heavy coatings of grey precipitate. No evident odors or readings above background on HNU. Standing water 2.0 feet below top of vault was about 4 inches deep at time of sampling.
JC06	Area 2, sediment in concrete vault. Probed to what felt to be a firm substrate 1.7 feet below top of sediment. Steel grey sludge with no evident odors or HNU readings.
JC07	Area 3A, adjacent to south side of building near the zinc disposal hopper, about 11 feet east of the front of the zinc hopper. Fine-grained,

light brown to tan soils, with fewer pebbles and cobbles, than other sites. Sample to about 10 inches. All HNU readings less than one ppm.

JC08 Area 3A, adjacent to west side of zinc hopper. Same as JC07.

JC09 Area 3B, just west of the zinc hopper in the general area of the reported historical PCB spill.

Generally fine grained, dark stained, moist. Sample taken six feet out from the building wall near a one inch vent pipe in wall.

JC10 Area 3B, four feet east of JC09. Slightly coarser grained than JC09, light grey, dry.

JC11 Area 3B, ten feet south of JC09. Four-inch diameter uncapped steel ~~sand~~ stand pipe with a 2.7 foot stickup above grade. Depth to water measured at 6.1 feet below top of casing at 1530 on 10-25-89. Sampled top of water column with bailer. HNU readings all less than one ppm.

JC12 Area 3B, standpipe described in JC11. Sounded bottom of pipe at 9.8 feet below top of casing. Estimated three inches of sludge in bottom. As sludge was disturbed to collect a sample of water from the bottom of the standpipe, an aromatic odor was evident, HNU readings gradually increased up to 8 ppm, and an oil was observed on the water.

JC13 Area 4, inside west side of building in warehouse section. Small removable grate in floor covering an assumed drain. Filled with at least 12 inches of absorbent material, possibly "Speedi Dry." HNU readings between 1 and 2 ppm, slightly above background level.

JC14 Area 3B, seven-foot diameter octagonal concrete cap over a six-foot diameter round concrete vault. Walls of vault (3 feet deep visible) are covered with one-inch diameter holes uniformly spaced 6 to 10 inches apart in four rows. Three pipes assumed for liquid routing, enter the vault near its visible base; a 10 inch diameter pipe towards the building, and a 6-inch and 4-inch diameter pipe towards the south. ? where do those go?

JC15 Area 5, along fence line on west side of property next to little league field. Soil with cobbles, with sample to about ten-inches depth. Potential baseline or background sample.

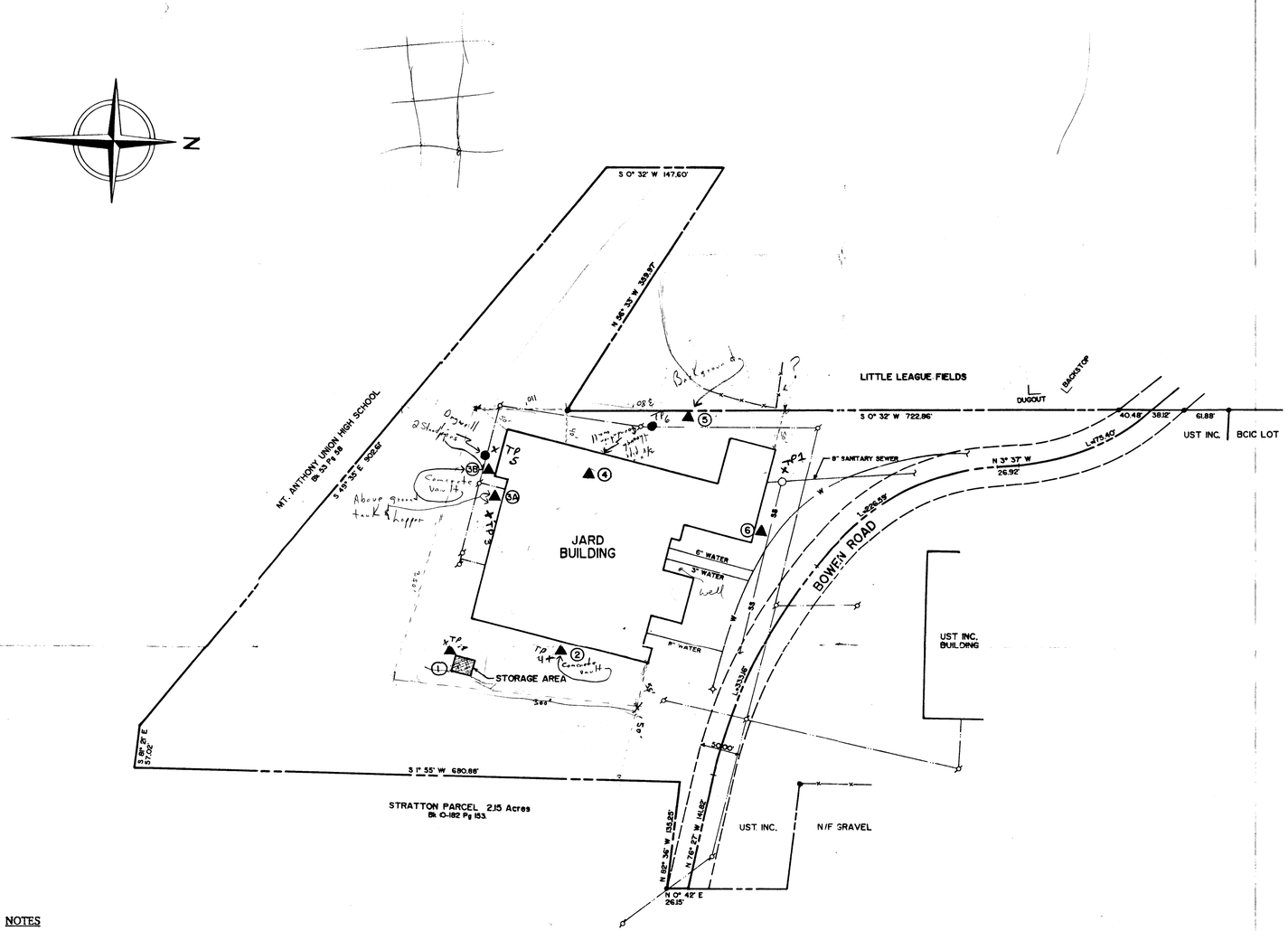
JC16 Field blank for liquid samples.

NOTES:

Analyses included: Schedule 601, Purgeable halocarbons
Schedule 602, Purgeable aromatics
Schedule 606, Phthalates
Schedule 608, PCBs and pesticides
Schedule 625, GC/MS BNA extractables
Zinc
Priority Pollutant Metals (PPM)

Sample locations JC02, JC03, JC04, JC05, JC07, JC08, JC09, JC10, JC11, JC13, JC15, and JC16 included analyses for 601, 602, 606, 608 and zinc.

Sample locations JC01, JC06, JC12, and JC14 included analyses for 601, 602, 608, 625, and PPM.



LEGEND

- SAMPLING LOCATION
- UTILITY POLE
- PIN
- PIPE
- FIRE HYDRANT
- SANITARY MANHOLE
- PROPERTY LINE
- OVERHEAD WIRES
- EDGE OF ROAD
- WATER LINE
- SANITARY SEWER LINE

SAMPLING AREA	DESCRIPTION
1.	Adjacent to the outside storage area. Soil samples JC01 and JC02.
2.	Adjacent to building near paint spray area. Soil samples JC03 and JC04. Water sample JC05 and sediment sample JC06 from inside concrete vault.
3A.	Adjacent to building near zinc disposal hopper. Soil samples JC07 and JC08.
3B.	Adjacent to building in area of historical PCB spill. Soil samples JC09 and JC10. Water samples JC11 and JC12 from open stand pipe. Sediment sample JC14 from inside concrete vault.
4.	Inside west side of building. Sediment sample JC13 in floor drain area beneath grate.
5.	Along fence line on west side of property next to little league field. Soil sample JC15.
6.	Gravel lot adjacent to loading dock.

NOTES

1. Property boundary information as shown on this plan taken from a map entitled "Lands of the Jard Corporation" dated December, 1977, ~~as prepared~~ by Daniel G. Cadiz, Licensed Land Surveyor, Bennington, Vermont. Wehran Engineering assumes no responsibility for same.

WEHRAN ENGINEERING
CONSULTING ENGINEERS

		DATE
DESIGN BY:		
DRAWN BY:	Eugene J. Montejo	11/9/87
CHECKED BY:	Paul J. [illegible]	11/10/87
SUPV. BY:		
APP'VD BY:		

Scales: 80 40 0 80 — SCALE IN FEET

JARD COMPANY
BENNINGTON VERMONT

PROPERTY ASSESSMENT

Sheet 1 of 1
Project No. 00272 HF